AudioSource®

AMPLIFIER APPLICATION GUIDE

AMP 100
AMP 102
AMP 110
AMP 210
AMP 310

Power

Signal / Clip
Left

Signal / Clip
Right

AudioSource®

Amplifier Guide

AudioSource AMP series amplifiers are designed for home and commercial audio distribution systems where high quality sound, flexibility, and reliability are essential. The AMP series offers exceptional value and many features that will make their installation and use easy and convenient.

The AudioSource AMP series consists of 5 amplifier models ranging from 50 watts per channel to 150 watts. The amplifiers share some common features with intelligent industrial design, superior engineering and value as key components to the AMP series success story.

AMP Series Products….. Value Priced Engineering Excellence!

All models incorporate the following features:

1. Bridgeable Outputs
2. Dual Stereo Inputs
3. Priority Input Switching (Automatic)
4. Heavy Duty Aluminum Faceplates
5. Stereo Line Outputs
6. Separate Volume and Balance Controls
7. 5-Way Binding Posts
8. A and B Speaker Selector Switches
9. Auto On (By-passable)

Amplifier Technology

The AMP 110, AMP 210, and AMP 310 incorporate very precise circuit topology to ensure the best audio reproduction. Dual Differential Error amplifiers ensure linearity and low noise operation. Triple Darlington output stages ensure the amplifier can drive complex speaker loads without adding distortion. In addition, toroidal power transformers are used with large filter capacitors to create stunning audio dynamics.

Careful Engineering

When discussing AMP series products with your contractors it's important to note that the entire AMP series went through rigorous testing procedures in Portland, Oregon by AudioSource's engineering staff. Years of audio engineering experience have been applied to these amplifiers to ensure years of use.

	AMP100		AMP102		AMP110		AMP210		AMP310	
Number of Channels	2		2		2		2		2	
Load Impedance	8ohm	4ohm	8ohm	4ohm	8ohm	4ohm	8ohm	4ohm	8ohm	4ohm
Rated Output Power	50	60	50	75	75	110	90	125	150	225
Frequency Response	20-20kHz		20-50kHz		20-50kHz		20-50kHz		20-50kHz	
Signal to Noise Ratio	100dB		100dB		100dB		100dB		100dB	
Input Sensitivity	1.5Vrms		350mV-2.8Vrms		350mV-2.8Vrms		350mV-2.8Vrms		350mV-2.8Vrms	
THD at Rated Power	<.2%		<.1%		<.1%		<.1%		<.1%	
Dimensions	2.9"H x 16.5"W x 9.25"D		3.8"H x 16.5"W x 8.25"D		3.8"H x 16.5"W x 13.75"D		3.8"H x 16.5"W x 13.75"D		5.5"H x 16.5"W x 13.75"D	
Weight	12 lbs		14.7 lbs		23.1 lbs		24 lbs		33.1 lbs	

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AMP 100

Applications:
- Ideal for use as a remote amplifier
- Use with Whole House Distributed Audio Systems
- Second Zone Amplifier
- Amplify MP3 Players
- Rear Channel Amplifier for Dolby 6.1 and 7.1 Systems
- Perfect for Computers and Video Games

Key Features:
- *Affordable!*
- 2 Independent channels rated at 50 watts into 8 ohms
- 60 watts per channel into 4 ohms
- Independent level and balance control
- Dual Auto-Switching Inputs
- Auto Signal Sensing Power On
- A/B Speaker selector
- Bridgeable

Specifications
- Power: 50 watts RMS @ 8 ohms
- 60 watts @ 4 ohms
- Less than 0.2% THD into 8 ohms
- Input Sensitivity 1.5 Vrms
- S/N Ratio: 100 dB A-weighted
- Frequency response: 20Hz to 20kHz

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AMP 102

Applications:

- Ideal for use as a Remote Amplifier
- Use with Whole House Distributed Audio Systems
- Second Zone Amplifier
- Amplify MP3 Players
- Rear Channel Amplifier for Dolby 6.1 and 7.1 Systems
- Perfect for Computers and Video Games
- Ideal for In-Wall and In-Ceiling Speaker Systems

Key Features:

- *Even More Affordable Power!*
- 2 Independent channels rated at 50 watts into 8 ohms
- 75 watts per channel into 4 ohms
- Independent level and balance control
- Dual Auto-Switching Inputs
- Auto Signal Sensing Power On
- A/B Speaker selector
- Front Panel diagnostic LEDs
- Bridgeable
- 12VDC "Trigger On"
- Rack-mount ready

Specifications

- Power: 50 watts RMS @ 8 ohms
- 75 watts @ 4 ohms
- Less than 0.1% THD into 8 ohms
- Input Sensitivity: 350mV to 2.8Vrms
- S/N Ratio: 100 dB A-weighted
- Frequency response: 20Hz to 50kHz

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AMP 110

Applications:

- Ideal for use as a Remote Amplifier
- Use with Whole House Distributed Audio Systems
- Second Zone Amplifier
- Amplify MP3 Players
- Rear Channel Amplifier for Dolby 6.1 and 7.1 Systems
- Perfect for Computers and Video Games
- Ideal for In-Wall and In-Ceiling Speaker Systems

Key Features:

- 2 Independent channels rated at 75 watts into 8 ohms
- Line 1/ Line 2 Priority input switching
- Line 2 Auxiliary output
- Front panel diagnostic LEDs
- Signal sensing "Power On"
- Bridgeable
- 12VDC "Trigger On"
- Speaker A/B Switching
- Triple-Darlington Power Amplifier Stages
- Dual-differential error amplifiers
- Rack-mount ready

Specifications

- Power: 75 watts RMS @ 8 ohms
- 110 watts @ 4 ohms
- 225 watts @ 8 ohms bridged
- Less than 0.1% THD into 8 ohms
- Input Sensitivity 350mV to 2.8Vrms
- S/N Ratio: 100 dB A-weighted
- Frequency response: 20Hz to 50kHz

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AMP 210

Applications:

- Ideal for use as a remote amplifier
- Single or Dual Zone Amplifier
- Amplify MP3 Players
- Rear Channel Amplifier for Dolby 6.1 and 7.1 Systems
- Excellent Stand-Alone Stereo Amplifier

Key Features:

- *Incredible Value!*
- 2 Independent channels rated at 90 watts into 8 ohms
- Line 1/ Line 2 Priority input switching
- Line 2 Auxiliary output
- Front panel diagnostic LEDs
- Front panel balance and volume trim controls
- Independent rear left/right master level controls
- Signal sensing "Power On"
- Bridgeable
- 12VDC "Trigger On"
- Speaker A/B switching
- High level inputs
- Triple-Darlington Power Amplifier Stages
- Dual-differential error amplifiers
- Rack-mount ready

Specifications

- Power: 90 watts RMS @ 8 ohms
- 125 watts @ 4 ohms
- 250 watts @ 8 ohms bridged
- Less than 0.1% THD into 8 ohms
- Input Sensitivity 350mV to 2.8Vrms
- S/N Ratio: 100 dB A-weighted
- Frequency response: 20Hz to 50kHz

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AMP 310

Applications:

- Ideal for use as a remote amplifier
- Single or Dual Zone Amplifier
- Amplify MP3 Players *(With Authority!)*
- Rear Channel Amplifier for Dolby 6.1 and 7.1 Systems
- Excellent Stand-Alone Stereo Amplifier

Key Features:

- Massive Flexible Power!
- 2 Independent channels rated at 150 watts into 8 ohms
- Line 1/ Line 2 Priority input switching
- Line 2 Auxiliary output
- Front panel diagnostic LEDs
- Front panel balance and volume trim controls
- Independent rear left/right master level controls
- Signal sensing "Power On"
- Bridgeable
- 12VDC "Trigger On"
- Speaker A/B switching
- High level inputs
- Triple-Darlington Power Amplifier Stages
- Dual-differential error amplifiers
- Rack-mount ready

Specifications

- Power: 150 watts RMS @ 8 ohms
- 225 watts @ 4 ohms
- 450 watts @ 8 ohms bridged
- Less than 0.1% THD into 8 ohms
- Input Sensitivity 350mV to 2.8Vrms
- S/N Ratio: 100 dB A-weighted
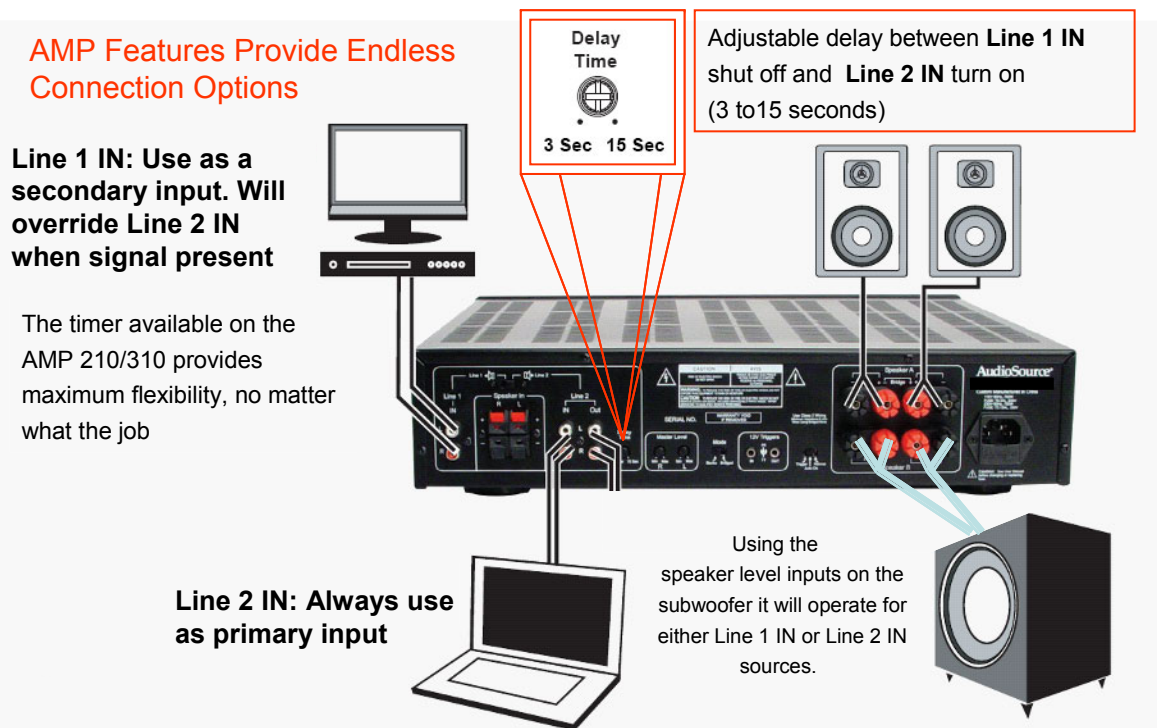- Frequency response: 20Hz to 50kHz

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What products go with the AudioSource AMP Series?

Any Program Source or Speaker You Want to Attain Peak Performance With!

The most exciting feature of the AMP series is the flexibility these products have to connect into any audio system: new or already installed, large or small, high-tech or traditional. This versatility comes from the expansive feature set built into all the AudioSource AMP products. Connect to other AudioSource products, such as the EQ 200, or powered subwoofers PSW 110 and PSW 112. Or connect to any receiver, MP3 player, TV, PC, Satellite Radio, Tape Deck, Phono... *or any other source.*

1. Use the High Level (Speaker Level) inputs on the AMP210/AMP310 to upgrade a zone that has speakers installed already
2. Save energy costs with the Auto-on or 12V Trigger-On feature
3. Add the ultimate gaming experience to a room using the auto-override feature of the AMP series by plugging in the audio out jack of any gaming console to the Line 1 inputs.
4. Add an MP3 player to a distributed audio system that automatically interrupts the regular program material just by pushing "Play"
5. A powered subwoofer connects to the AMP by plugging the Line 2 output of the amplifier, or amplified speaker outputs to the subwoofer.

These are all easily planned upgrades that will keep your customers coming back for future upgrades and more audio excitement.

AMP Features Provide Endless Connection Options

Delay Time
3 Sec   15 Sec

Adjustable delay between **Line 1 IN** shut off and **Line 2 IN** turn on (3 to15 seconds)

Line 1 IN: Use as a secondary input. Will override Line 2 IN when signal present

The timer available on the AMP 210/310 provides maximum flexibility, no matter what the job

Line 2 IN: Always use as primary input

Using the speaker level inputs on the subwoofer it will operate for either Line 1 IN or Line 2 IN sources.

AMP Series... *Let's Look at Some More Applications*

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Applications at a Glance…

The TV sound package provides excellent audio reproduction where television speakers fall short. For customers who don't need a full surround sound home theater but aren't satisfied with the sound coming from their new flat screen TV.

Amplifier
AMP 100
AMP 102
AMP 110
AMP 210
AMP 310

In-Wall Speakers*
AC5W
AC6W
AC8W
AC515W
AE5S
AE6S
AE8S
AE515

Line 2 IN
(Primary Input)

Line 2 OUT
(Auxiliary Output)

***or use any pair of 4-8 Ohm speakers**

Audio Line OUT from TV

Powered Subwoofer
PSW 110
PSW 112

Source:
Cable Box
Digital Antenna
Surround Receiver
or TV Audio Outputs
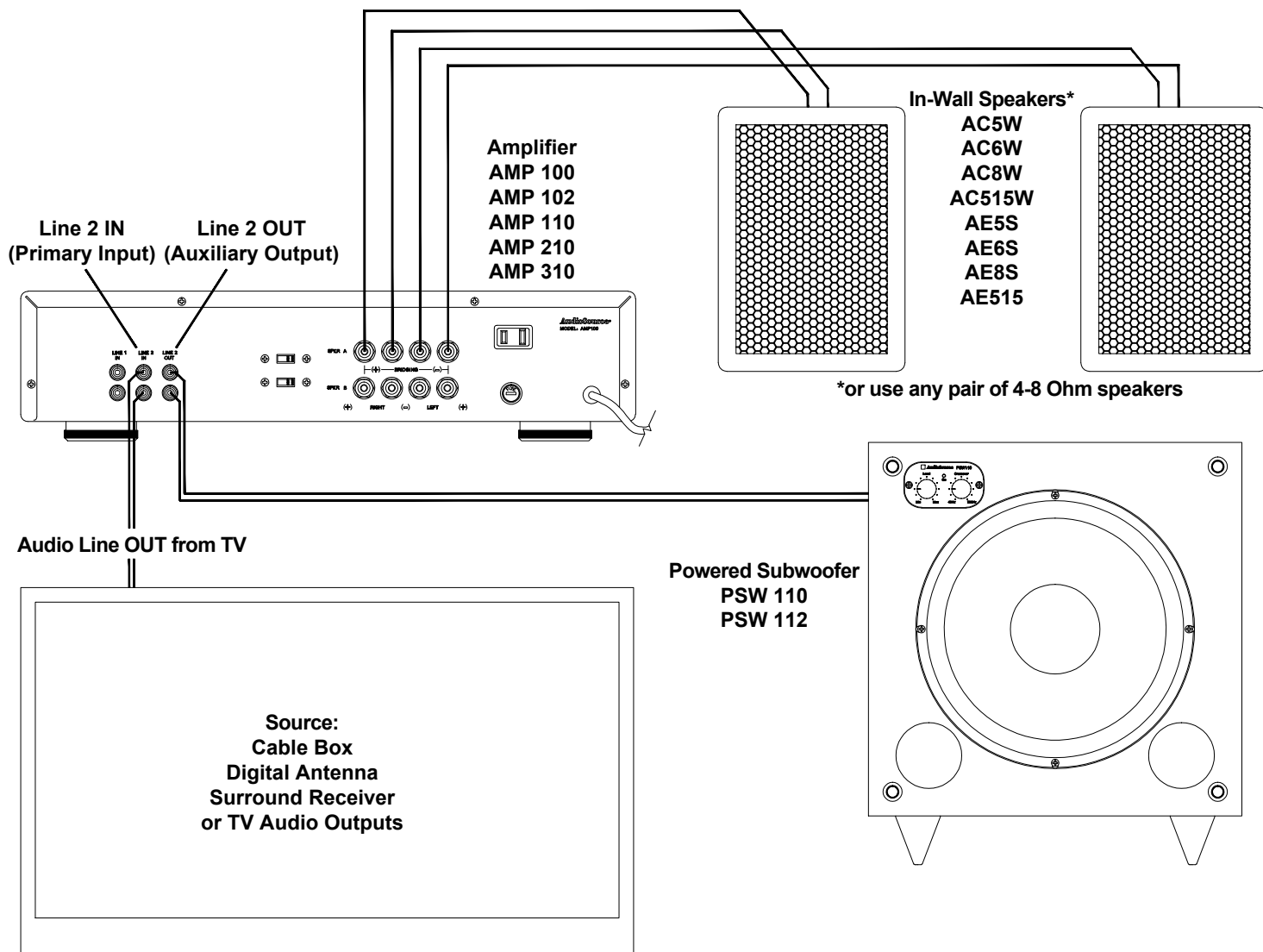
1) Easily add excellent TV sound
2) Plan future upgrades with amplifier Zone B output

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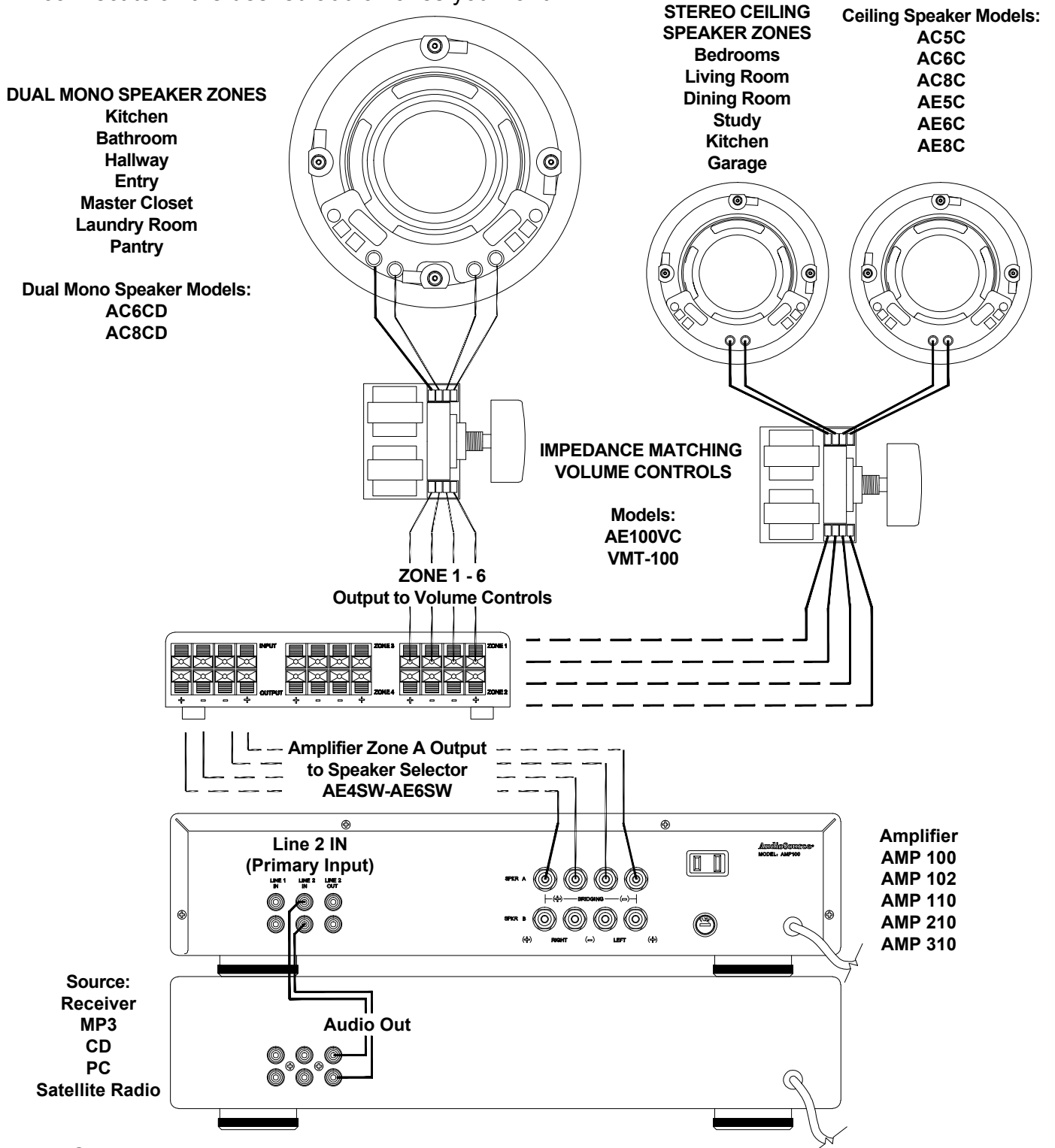
Applications at a Glance…

Whole house distributed audio is a snap with the added power of AudioSource AMP Series power amplifiers. Just add a selector and/or some impedance matching volume controls and connect to all the desired audio zones you want!

STEREO CEILING SPEAKER ZONES
Bedrooms
Living Room
Dining Room
Study
Kitchen
Garage

Ceiling Speaker Models:
AC5C
AC6C
AC8C
AE5C
AE6C
AE8C

DUAL MONO SPEAKER ZONES
Kitchen
Bathroom
Hallway
Entry
Master Closet
Laundry Room
Pantry

Dual Mono Speaker Models:
AC6CD
AC8CD

IMPEDANCE MATCHING VOLUME CONTROLS

Models:
AE100VC
VMT-100

ZONE 1 - 6
Output to Volume Controls

Amplifier Zone A Output to Speaker Selector AE4SW-AE6SW

Line 2 IN (Primary Input)

LINE 1 IN   LINE 2 IN   LINE 2 OUT

SPKR A   (+) BRIDGING (-)
SPKR B   (+) RIGHT (-) LEFT (+)

AudioSource®
MODEL: AMP100

Amplifier
AMP 100
AMP 102
AMP 110
AMP 210
AMP 310

Source:
Receiver
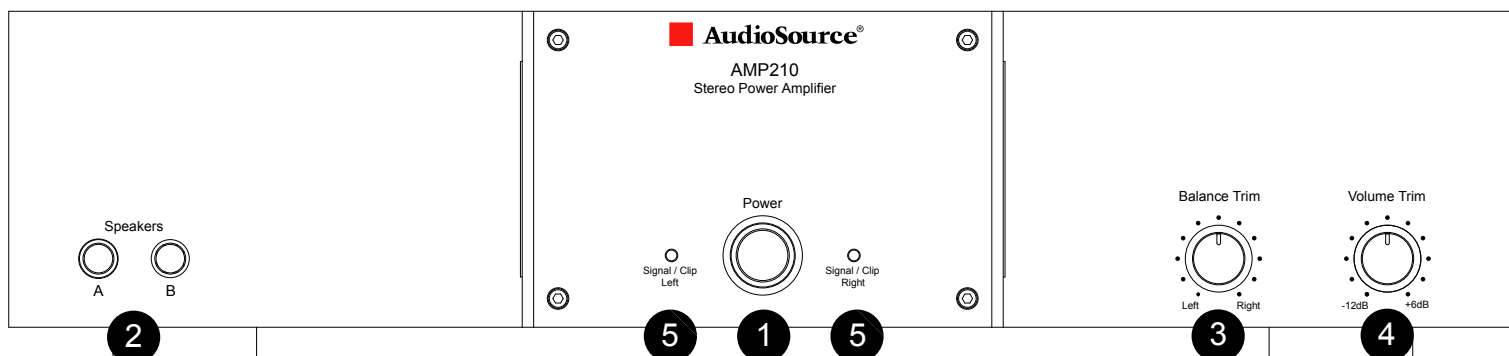**MP3**
CD
PC
Satellite Radio

Audio Out

1) Connect any source, including whole house systems
2) Scale to any number of zones by adding another amp (Line 2 OUT), or another speaker selector (ZONE B OUT).

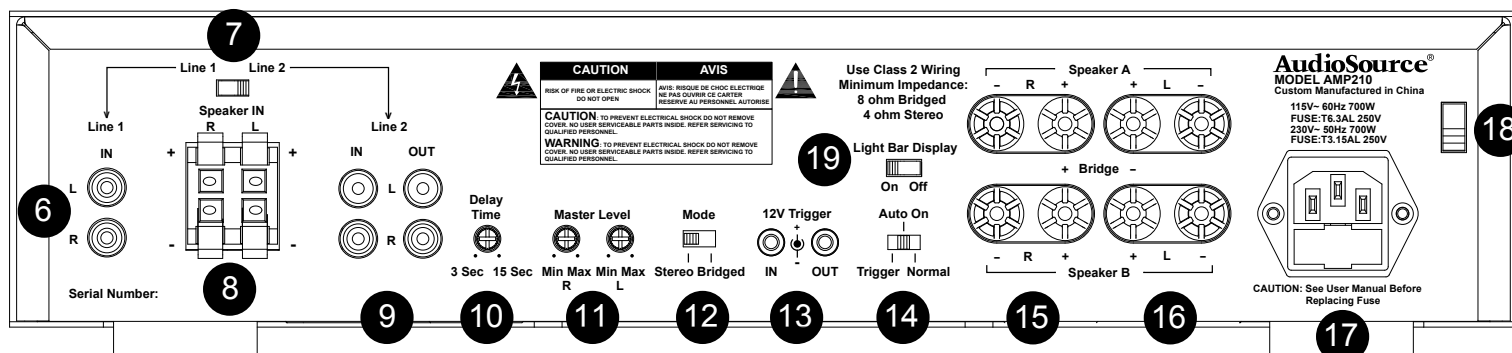# AMP Series Products….. Value Priced Engineering Excellence!

Powerful, Flexible, Reliable.

All You Need to Bring Complete Satisfaction to Your Customer.

AudioSource®
AMP210
Stereo Power Amplifier

Power

Signal / Clip Left

Signal / Clip Right

Balance Trim — Left — Right

Volume Trim — -12dB — +6dB

Speakers A B

FRONT PANEL CONTROLS

1. Power
   The front panel power switch switches the AMP210/310 on or off.
2. Speaker Zone Selector
   Selects active speaker output (A or B)

3. Balance Trim
   Fades speaker output between the Right and Left Channels
4. Volume Trim
   Allows fine adjustment of amplifier volume.
5. Clip LEDs
   Blinks red during signal clipping. Reduce volume slightly.

Line 1   Line 2

Speaker IN
R   L

Line 1

Line 2

IN

L   R

IN   OUT
L
R

CAUTION   **AVIS**
RISK OF FIRE OR ELECTRIC SHOCK DO NOT OPEN
AVIS: RISQUE DE CHOC ELECTRIQE NE PAS OUVRIR CE CARTER RESERVE AU PERSONNEL AUTORISE
CAUTION: TO PREVENT ELECTRICAL SHOCK DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.
WARNING: TO PREVENT ELECTRICAL SHOCK DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

Use Class 2 Wiring
Minimum Impedance:
8 ohm Bridged
4 ohm Stereo

Light Bar Display
On   Off

Delay Time
3 Sec   15 Sec

Master Level
Min Max   Min Max
R   L

Mode
Stereo Bridged

12V Trigger
IN   OUT

Auto On
Trigger   Normal

Serial Number:

Speaker A
— R +   + L —

+ Bridge —

— R +   + L —
Speaker B

AudioSource®
MODEL AMP210
Custom Manufactured in China

115V~ 60Hz 700W
FUSE:T6.3AL 250V
230V~ 50Hz 700W
FUSE:T3.15AL 250V

CAUTION: See User Manual Before Replacing Fuse

REAR PANEL CONTROLS

6. Line 1 Input
   A switching input that can be used if a second source is desired. Will take over when a signal is present. When there is no signal at this input the amplifier switches back to the Line 2 or "primary" input.

7. Speaker Level Input Line Select
   Switches the input of the speaker level input to Line 1 or Line 2.

8. Speaker Level Input
   Can be used to connect a source with speaker level output instead of line level outputs.

9. Line 2 Input/Output
   The primary line level input and output for a single source connection.

10. Delay Time
    Allows for a 3-15 second delay to be set and accommodate the source connected to the Line 1 input.

11. Master Level Controls
    Provides independent adjustment of Left and Right channel maximum level.

12. Mode Select Switch
    Switches the amplifier from Stereo mode to Bridged Mono mode

13. 12V Trigger
    Allows the amplifier to be powered on by other electronics or to power on other electronics via a 3.5mm mini phone plug cable.

14. Power Mode
    Set it to Normal for manual power on/off. Set to Auto-On for signal sensing. Set to Trigger when using 12V trigger for on/off.

15. Right Channel Speaker Output
    Right channel terminals for speaker outputs A and B.

16. Left Channel Speaker Output
    Left channel terminals for speaker outputs A and B.

17. Mains Power Inlet & Fuse Holder
    Accepts IEC type line cord. A fuse located in integrated holder provides safety protection from fault conditions: replace fuse with one of same type and rating only.

18. Mains Voltage Selector
    Voltage selection switch is preset to 115V (USA). For use in areas which require 230V contact your dealer. Fuse must be of type and rating marked on amplifier for use at local mains voltage.

19. Light Bar Display Control
    Turns light bar display on front panel on or off. Does not control Signal/Clip LEDs or power button light ring.

AudioSource®
Flexibility by Design!

MODEL	WATTS PER CHANNEL			FEATURES AT A GLANCE							
	Stereo 8 Ω	Stereo 4 Ω	Bridged 8 Ω	Channels	Inputs	Priority Input Switching	A/B Speaker Selection	Auto-On	12v Trigger	Rack Mount Ready	High Level Inputs
AMP 100	50	60	160	2	2	✓	✓	✓	✗	✗	✗
AMP 102	50	75	150	2	2	✓	✓	✓	✓	✓	✗
AMP 110	75	110	225	2	2	✓	✓	✓	✓	✓	✗
AMP 210	90	125	250	2	2	✓	✓	✓	✓	✓	✓
AMP 310	150	225	450	2	2	✓	✓	✓	✓	✓	✓

AudioSource®

HEARD NOT SEEN

HERE AT AudioSource, we understand the power and importance of sound. That's why we've been connecting people to it for over 20 years. By powering, connecting and projecting its flow, we feel we have a responsibility: to create the best in sound quality. In this pursuit, we make no compromises. Our functional designs improve performance, and through expert and efficient engineering, we ultimately produce higher quality products at a great value.

We know not everyone will notice, but to those who understand and appreciate the small elements that make a difference in the flow of sound, we believe AudioSource's products stand alone.

See all of our products
at
www.audiosource.net

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